

## CLAIMS

1 A method of operating a FIFO memory to store and retrieve data packets,  
comprising the steps of

5 providing a head pointer indicating progressively where entries are to be written to the FIFO  
memory.

10 providing a tail pointer indicating progressively where entries are to be read from the FIFO  
memory,

15 for each packet stored in the memory, writing a status word including status data and a sync  
pattern,

20 for each packet to be read from the memory.

25 reading the respective status word,

determining whether the sync pattern matches a predetermined sync pattern; and

(i) forwarding the packet when said status word meets predetermined criteria including  
match between the sync pattern and a predetermined sync pattern,

(ii) preventing forwarding of said packet when said status word fails to meet said  
predetermined criteria

2 A method according to claim 1 including writing, for each packet, a corresponding  
bit mask and wherein said predetermined criteria include a match between a predetermined  
port and a port indicated by the bit mask